# REMARKS

### I.    Claims 1-6, 9, 14, 15, 19, 20 and 22-24 Are Allowable

The Office has rejected claims 1-6, 9, 14, 15, 19, 20 and 22-24 on page 3 of the Office Action, under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,985,444 ("Rosen") in view of United States Patent No. 7,295,570 ("Arnold"). Applicants respectfully traverse the rejections.

### A.  Claims 1-6, 9, 14 and 15

The Office has failed to provide a *prima facie* case of obviousness for claim 1. The cited portions of Rosen and Arnold do not disclose or suggest the specific combination of claim 1. For example, the Office Action admits that Rosen fails to disclose selecting a profile that has the highest estimated packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. *See* Office Action, page 4. The Office Action asserts that column 5, lines 10-67 and FIG. 2, of Arnold discloses this feature. *See* Office Action, page 4.

However, in contrast to claim 1, Arnold discloses a network device that determines profiles for each interface of the network device. *See* Arnold, col. 2, lines 29-30. Each profile is determined by a downstream rate and a respective upstream rate. A profile is selected according to a top-down selection process or from a bottom-up selection process in sequential fashion until a satisfactory link is established. *See* Arnold, column 5, lines 61-67 to column 6, lines 1-8; FIG. 4. Thus, Arnold is directed towards a method of connecting an interface to a network device based on a profile with the fastest or slowest rate rather than selecting a profile at a particular measured code violation of the digital subscriber line, as in claim 1. Accordingly, Arnold teaches away from determining a number of code violations of the digital subscriber line and selecting a profile that has the highest estimated packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Therefore, the cited portions of Rosen and Arnold, separately or in combination, do not disclose or suggest each and every element of claim1. Hence, claim 1 is allowable.

Claims 2-6, 9, 14 and 15 depend from claim 1, which Applicants have shown to be allowable. Accordingly, claims 2-6, 9, 14 and 15 are also allowable, at least by virtue of their dependency from claim 1.

Further, claim 9 includes additional features that are not disclosed or suggested by the cited portions of Rosen and Arnold. For example, the cited portions of claim 9 calls for a graphical display that illustrates the first estimated data packet throughput value, the second estimated data packet throughput value, and the number of code violations. The Office Action asserts that column 5, lines 10-67 and FIG. 2 of Arnold disclose this feature. *See* Office Action, page 6. Instead, Arnold discloses a report generator for generating reports of the profiles of each interface. *See* Arnold, column 9, lines 15-17. However, Arnold does not disclose or suggest a graphical display and does not disclose a graphical display that illustrates the first estimated data packet throughput value, the second estimated data packet throughput value, and the number of code violations, as in claim 9. For this additional reason, claim 9 is allowable.

Claim 14 includes additional features that are not disclosed or suggested by the cited portions of Rosen and Arnold. For example, the cited portions of Rosen and Arnold do not disclose that the first set of data packet throughput points form a first display curve and the second set of data packet throughput points form a second display curve. The Office Action asserts that this feature is disclosed by column 12, lines 38-67 and FIG. 3 of Rosen. *See* Office Action, page 6. Rosen discloses assignment of a color code to a line based upon line characteristics matching or not matching a certain criteria. *See* Rosen, column 12, lines 38-47. This color code assignment of Rosen is not a display curve, as in claim 14. Accordingly, the cited portions of Rosen do not disclose or suggest that the first set of data packet throughput points form a first display curve and the second set of data packet throughput points form a second display curve, as in claim 14. For this additional reason, claim 14 is allowable.

B. Claims 19, 20 and 22

The cited portions of Rosen and Arnold do not disclose or suggest the specific combination of claim 19. For example, the Office Action admits that Rosen fails to disclose selecting a profile that has the highest estimated data packet throughput value at a particular

measured code violation of each digital subscriber line, as in claim 19. *See* Office Action, page 8. The Office Action asserts that column 5, lines 10-67 and FIG. 2, of Arnold discloses this feature. *See* Office Action, page 8.

However, in contrast to claim 19, Arnold discloses a network device that determines profiles for each interface of the network device. *See* Arnold, col. 2, lines 29-30. Each profile is determined by a downstream rate and a respective upstream rate. A profile is selected according to a top-down selection process or from a bottom-up selection process in sequential fashion until a satisfactory link is established. *See* Arnold, column 5, lines 61-67 to column 6, lines 1-8. Thus, Arnold is directed towards a method of connecting an interface to a network device based on a profile with the fastest or slowest rate rather than selecting a profile based on throughput values using <u>measured code violations</u> of the digital subscriber line, as in claim 19. Accordingly, the cited portions of Arnold do not suggest determining the estimated data packet throughput values based on the <u>measurements of code violations</u> for each of the digital subscriber lines in the group of digital subscriber lines and selecting a profile based on the estimated data packet throughput values that are the highest estimated data packet throughput values at the <u>particular measured code violations</u> of each digital subscriber line, as in claim 19. Therefore, the cited portions of Rosen and Arnold, separately or in combination, do not disclose or suggest each and every element of claim19. Hence, claim 19 is allowable.

Claims 20 and 22 depend from claim 19, which Applicants have shown to be allowable. Accordingly, claims 20 and 22 are also allowable, at least by virtue of their dependency from claim 19.

## C. <u>Claims 23-24</u>

The cited portions of Rosen and Arnold do not disclose or suggest the specific combination of claim 23. For example, the Office Action admits that Rosen fails to disclose selecting a profile that has the highest estimated data throughput at a particular measured code violation for at least one of the digital subscriber lines. *See* Office Action, page 9. The Office Action asserts that column 5, lines 10-67 and FIG. 2 of Arnold discloses this feature.

However, in contrast to claim 23, Arnold discloses a network device that determines profiles for each interface of the network device. *See* Arnold, col. 2, lines 29-30. Each profile is determined by a downstream rate and a respective upstream rate. A profile is selected according to a top-down selection process or from a bottom-up selection process in sequential fashion until a satisfactory link is established. *See* Arnold, column 5, lines 61-67 to column 6, lines 1-8. Thus, Arnold is directed towards a method of connecting an interface to a network device based on a profile with the fastest or slowest rate rather than selecting a profile based on throughput values using measured code violations of the digital subscriber line, as in claim 23. Accordingly, the cited portions of Arnold do not disclose or suggest a controller that selects a profile from a profile database that has the highest data packet throughput value at a particular measured code violation for at least one of the digital subscriber lines, as in claim 23. Therefore, the cited portions of Rosen and Arnold, separately or in combination, do not disclose or suggest each and every element of claim 23. Hence, claim 23 is allowable.

Further, claim 23 includes additional features that are not disclosed or suggested by the combination of the cited portions of Rosen and Arnold. For example, the cited portions of Rosen and Arnold do not disclose or suggest a graphical report that includes a first profile curve illustrating data packet throughput values with respect to code violation data for the first profile and a second profile curve illustrating data packet throughput values with respect to code violation data for the second profile, as in claim 23. Instead, Arnold discloses a report generator for generating reports of the profiles of each interface. *See* Arnold, column 9, lines 15-17. Accordingly, the cited portions of Arnold do not disclose a graphical report that includes a first profile curve illustrating data packet throughput values with respect to code violation data for the first profile and a second profile curve illustrating data packet throughput values with respect to code violation data for the second profile, as in claim 23. For this additional reason, claim 23 is allowable.

Claim 24 depends from claim 23, which Applicants have shown to be allowable. Accordingly, claim 24 is also allowable, at least by virtue of its dependency from claim 23.

## II.    Claim 7 is Allowable

The Office has rejected claim 7 on page 11 of the Office Action, under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of Arnold and further in view of United States Patent Publication No. 2003/0189977 ("Sweitzer").  Applicants respectfully traverse the rejection.

Claim 7 depends from claim 1 which Applicants have shown to be allowable.  The cited portions of Sweitzer do not disclose or suggest the elements recited in claim 1 that are not disclosed or suggested by Rosen and Arnold.  For example, the cited portions of Sweitzer do not disclose or suggest a method of selecting a profile comprising selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as recited in claim 1.  Sweitzer is directed towards a communication system in which a central office and a remote location negotiate with one another in order to arrive at an optimum data rate.  *See* Sweitzer, Abstract. The cited portions of Sweitzer fail to disclose or suggest selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1.  Thus, claim 7 is allowable, at least by virtue of its dependency from claim 1.

## III.    Claims 8 and 10 are Allowable

The Office has rejected claims 8 and 10, on page 12 of the Office Action, under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of Arnold and further in view of United States Patent No. 6,498,808 ("Tzannes").  Applicants respectfully traverse the rejections.

Claim 8 depends from claim 1 which Applicants have shown to be allowable.  The cited portions of Tzannes do not disclose or suggest the elements recited in claim 1 that are not disclosed or suggested by Rosen and Arnold.  For example, the cited portions of Tzannes do not disclose or suggest a method of selecting a profile comprising selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as recited in claim 1.  Tzannes is directed towards a communication system that uses multicarrier modulation to enjoy higher

immunity to impulse noise, a lower complexity equalization requirement, and higher data rate and bandwidth flexibility. *See* Tzanne*s*, column 1, lines 19-43. The cited portions of Tzannes fail to disclose or suggest selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Thus, claim 8 is allowable, at least by virtue of its dependency from claim 1.

Further, claim 8 includes additional features that are not disclosed or suggested by the combination of Rosen, Arnold and Tzannes. For example, the cited portions of Rosen, Arnold and Tzannes do not disclose or suggest at least one of a first set of the plurality of profiles to be an interleaved profile and another of the first set of the plurality of profiles to be a non-interleaved profile, as in claim 8. The Office Action admits that this feature is not disclosed by Rosen and Arnold. Rather, the Office Action asserts that column 21, lines 1-15 of Tzannes discloses this feature. *See* Office Action, page 12. Instead, Tzannes discloses a dual latency system that has an interleaved <u>path</u> and a non-interleaved <u>path</u>. *See* Tzannes, column 21, lines 1-5. However, Tzannes does not disclose or suggest an interleaved <u>profile</u> or a non-interleaved <u>profile</u>, as in claim 8. An interleaved path is not an interleaved profile, and a non-interleaved path is not a non-interleaved profile. For this additional reason, claim 8 is allowable.

Claim 10 includes additional features that are not disclosed or suggested by the cited portions of Rosen, Arnold and Tzannes. For example, the cited portions of Rosen, Arnold and Tzannes do not disclose or suggest a graphical display to illustrate a first set of data packet throughput points for the first profile and a second set of data packet throughput points for the second profile, as in claim 10. For this additional reason, claim 10 is allowable.

## IV.    Claims 11-13 are Allowable

The Office has rejected claims 11-13 on page 13 of the Office Action, under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of Arnold and United States Patent No. 6,678,245 "(Cooper"). Applicants respectfully traverse the rejections.

Claims 11-13 depend from claim 1 which Applicants have shown to be allowable. The cited portions of Cooper do not disclose or suggest the elements recited in claim 1 that are not disclosed or suggested by Rosen and Arnold. For example, the cited portions of Cooper do not disclose or suggest a method of selecting a profile comprising selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Instead, Cooper is directed towards a performance management operations system that receives information from network elements regarding loads carried and lost packets, performs calculations, and develops recommendations for setting adjustable network elements to affect the quality of service. *See* Cooper, column 1, lines 52-60. The cited portions of Cooper fail to disclose or suggest selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Thus, claims 11-13 are allowable, at least by virtue of their dependency from claim 1.

## V.     Claims 16, 17 and 21 are Allowable

The Office has rejected claims 16, 17 and 21 on page 14 of the Office Action, under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of Arnold and United States Patent No. 7,218,645 ("Lotter"). Applicants respectfully traverse the rejections.

### A. Claims 16 and 17

Claims 16 and 17 depend from claim 1 which Applicants have shown to be allowable. The cited portions of Lotter do not disclose or suggest the elements recited in claim 1 that are not disclosed or suggested by Rosen and Arnold. For example, the cited portions of Lotter do not disclose or suggest a method of selecting a profile comprising selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Lotter is directed towards a system for optimizing performance of a radio link in terms of power efficiency, bandwidth delivery, energy consumption, channel noise, and overall performance. *See* Lotter, column 1, lines 6-10. Accordingly, the cited portions of Lotter do not disclose or suggest selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber

line, as in claim 1. Thus, claims 16 and 17 are allowable, at least by virtue of their dependency from claim 1.

Further, claim 17 includes additional features that are not disclosed or suggested by the combination of Rosen, Arnold and Lotter. For example, the cited portions of Rosen, Arnold and Lotter do not disclose that the TCP/IP throughput is to be determined based on laboratory testing data, as in claim 17. Instead, Lotter discloses that the overall throughput of a TCP/IP based wireless packet data link is determined in part by the length of the packet. *See* Lotter, column 12, lines 9-12. The length of a data packet is not TCP/IP throughput that is determined based on laboratory testing data, as in claim 17. For this additional reason, claim 17 is allowable.

### B. Claim 21

Claim 21 depends from claim 19 which Applicants have shown to be allowable. The cited portions of Lotter do not disclose or suggest the elements recited in claim 19 that are not disclosed or suggested by the cited portions of Rosen and Arnold. For example, the cited portions of Lotter do not disclose or suggest a method comprising selecting a profile for each digital subscriber line in the group of digital subscriber lines wherein each profile is selected based on the estimated data packet throughput values that are the highest estimated data packet throughput values at the particular measured code violations of each digital subscriber line, as in claim 19. Instead, the cited portions of Lotter are directed towards a system for optimizing performance of a radio link in terms of power efficiency, bandwidth delivery, energy consumption, channel noise, and overall performance. *See* Lotter, column 1, lines 6-10. Accordingly, the cited portions of Lotter do not disclose or suggest selecting a profile for each digital subscriber line in the group of digital subscriber lines wherein each profile is selected based on the estimated data packet throughput values that are the highest estimated data packet throughput values at the particular measured code violations of each digital subscriber line, as in claim 19. Thus, claim 21 is allowable, at least by virtue of its dependency from claim 19.

### VI.    Claim 18 is Allowable

The Office has rejected claim 18 on page 15 of the Office Action, under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of Arnold and further in view of United

States Patent Publication No. 2003/0033262 ("Aoki"). Applicants respectfully traverse the rejection.

Claim 18 depends from claim 1 which Applicants have shown to be allowable. The cited portions of Aoki do not disclose or suggest the elements recited in claim 1 that are not disclosed or suggested by Rosen and Arnold. For example, the cited portions of Aoki do not disclose or suggest a method of selecting a profile comprising selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Aoki is directed towards a line connection controller that has switching equipment to control line switching in accordance with a request from a subscriber. *See* Aoki, Abstract. Accordingly, the cited portions of Aoki do not disclose or suggest selecting, from the first profile and the second profile, a profile that has the highest estimated data packet throughput value at a particular measured code violation of the digital subscriber line, as in claim 1. Thus, claim 18 is allowable, at least by virtue of its dependency from claim 1.

## CONCLUSION

Applicants have pointed out specific features of the claims not disclosed, suggested, or rendered obvious by the cited portions of the references applied in the Office Action.

Accordingly, Applicants respectfully requests reconsideration and withdrawal of each of the objections and rejections, as well as an indication of the allowability of each of the pending claims.
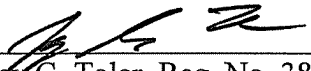
Any changes to the claims in this amendment, which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

The Examiner is invited to contact the undersigned attorney at the telephone number listed below if such a call would in any way facilitate allowance of this application.

The Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,

_6-17-2008_
Date

Jeffrey G. Toler, Reg. No. 38,342
Attorney for Applicant(s)
TOLER LAW GROUP
8500 Bluffstone Cove, Suite A201
Austin, Texas 78759
(512) 327-5515 (phone)
(512) 327-5575 (fax)